

REMARKS

The Examiner is thanked for the thorough review and consideration of the present application. The non-final Office Action dated April 23, 2004 has been received and its content carefully reviewed.

By this response, claims 3, 7, 11 and 26 have been cancelled without prejudice or disclaimer of the subject matter recited therein, and claims 1, 5, 9, 12, 14 and 24 have been amended. No new matter has been added. Claims 1-2, 5-6, 9-10, 12, 14-25, and 28-29 are pending. Reconsideration and withdrawal of the rejections in view of the above amendments and the following remarks are requested.

In the Office Action, claims 3, 7, 11-12 and 26 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Applicant has cancelled claims 3, 7, 11 and 26 without prejudice or disclaimer. Reconsideration and withdrawal of the rejection are requested.

In the Office Action, claims 1-3, 5-7, 9-11, 14-15, 23-26 and 28 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,505,547, issued to Sekimura in view of U.S. Patent No. 5,246,782, issued to Kennedy et al. (hereafter "Kennedy"). Claims 3, 7, 11 and 26 have been cancelled. Thus, the rejection, as applied to these cancelled claims is rendered moot. Applicant respectfully traverses the rejection because neither Sekimura nor Kennedy, analyzed alone or in combination, teaches or suggests the combined features recited in the claims of the present application. In particular, Sekimura and Kennedy fail to teach or suggest a liquid crystal display device including, among other features "passivation layers on outer surfaces of the first and second substrates" as recited in independent claim 1 of the present application.

Because Sekimura and Kennedy fail to teach or suggest at least this feature of claim 1, claim 1 and its dependent claim 2, are allowable over any combination of Sekimura and Kennedy.

The Office Action concedes that "Sekimura and the conventional art fail to disclose the passivation film made of BenzoCycloButene (BCB)." To compensate for the deficient teachings of Sekimura, the Office Action relies upon the teachings of Kennedy. Based upon the teachings of Kennedy, the Office Action alleges that it would have been obvious to one having ordinary

skill in the art at the time the invention was made to further modify the LCD device of Sekimura with a passivation film made of BCB. Applicant respectfully disagrees.

“Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art” (see, MPEP 2143.01).

In addition to the fact that Sekimura fails to teach all the structural features recited in the claims of the present application and discussed above, Applicant respectfully submits the device disclosed in Sekimura is directed towards reducing the amount of light reflected by the transparent electrode to improve image quality and contrast (see, col. 1, lines 29-32 and col. 9, line 59-62). In Sekimura, this goal is achieved by providing a “refractive index equal to or substantially equal to that n_0 of said substrate... Thus, in a case where the transparent substrate is composed of glass, it is desirable to coat the surfaces thereof with an inorganic material having substantially the same refractive index as that of said glass, in order to prevent deterioration of the liquid crystal by alkali ions generally contained in the glass” (emphasis added, col. 9, lines 26-38).

Kennedy discloses various types of laminates that may be useful in electronics, building materials, optics for applications, etc. (col. 1, lines 53-55). However, Kennedy fails to provide teachings that would remedy the deficient teachings of Sekimura such that all the limitations of independent claim 1 would be met.

Further, Applicant submits the references must be considered as a whole and must suggest the desirability and thus the obviousness of making the combination (see, MPEP 2141.01) In the present case, the applied prior art references of Sekimura and Kennedy do not contain any suggestion (expressly or implied) that they be combined, or that they be combined in the manner suggested in the Office Action. Specifically, claim 1 of the present invention includes “passivation layers on outer surfaces of the first and second substrates”. As stated above, Sekimura is directed towards reducing the amount of light reflected by the transparent electrode. There is no teaching within Sekimura nor Kennedy which would motivate one of ordinary skill in the art to modify the “desirable” embodiment disclosed in col. 9, lines 26-38 in Sekimura to provide a liquid crystal display device having the combined features recited in the

claims of the present application. As such, a *prima facie* case of obviousness has not been established. Claim 1 and its dependent claim 2 are allowable over Sekimura and Kennedy.

Claim 5 is an independent claim that recites features similar to independent claim 1 discussed above. Specifically, claim 5 recites an LCD device that includes, among other features, "passivation layers on outer surfaces of the first and second etched substrates." As stated above with respect to independent claim 1, one of ordinary skill in the art would not be motivated to modify the device in Sekimura by the teachings in Kennedy to obtain an LCD device having the combined features recited in independent claim 5. Accordingly, claim 5 and its dependent claim 6 are allowable over Sekimura and Kennedy.

Claim 9 is an independent claim directed to a method for manufacturing an LCD device, including, among other features, "forming passivation layers on an entire outer surface of the first and second substrates." As stated above with respect to independent claim 1, one of ordinary skill in the art would not be motivated by the teachings of Kennedy to modify the device disclosed in Sekimura to obtain a method for manufacturing an LCD device that includes the combined features recited in independent claim 9. Accordingly, claim 9 and its dependent claims 10, 14-15 and 23 are allowable over any combination of Sekimura and Kennedy.

Claim 24 is an independent claim directed to a liquid crystal display (LCD) device that includes, among other features, "passivation layers on outer surfaces of the first and second substrates." As discussed above with respect to independent claim 1, there is no motivation within the teachings of Sekimura nor Kennedy that would motivate one of ordinary skill in the art to modify the device disclosed in Sekimura to obtain a LCD device having the combined features recited in independent claim 24. Accordingly, claim 24 and its dependent claims 25 and 29 are allowable over Sekimura and Kennedy.

Reconsideration and withdrawal of the rejection of claims 1-3, 5-7, 9-11, 14-15, 23-26 and 29 are respectfully requested.

In the Office Action, dependent claim 12 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Sekimura in view of Kennedy and further in view of U.S. Patent No. 6,150,430, issued to Walters et al. (hereafter "Walters"); dependent claims 16-20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Sekimura in view of Kennedy; dependent claims 21 and 22 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Sekimura in view of Kennedy and further in view of U.S. Publication No. US20020079289A1, issued to

Doh. Applicant traverses the rejection because the present application (Application Serial No. 10/025,765) and Doh were, at the time of the invention of the present application, made and owned by LG.Philips LCD Co., Ltd. Therefore, Doh is not available as prior art against the claims of the present application.

Additionally, Applicant respectfully traverses the rejection because Walters, analyzed alone or in any combination with Sekimura and Kennedy, fails to teach or suggest the combined features recited in the claims of the present application. Specifically, Walters and Kennedy fail to provide any teaching or suggestion that would remedy the deficient teachings of Sekimura, nor provide motivation to one of ordinary skill in the art to modify the device in Sekimura to obtain a liquid crystal display device and method of manufacturing a LCD device having the combined features recited in independent claims 5, 9 and 24. By virtue of their dependence from independent claims 5, 9, and 24, dependent claims 12, 16-22, and 28 also contain the allowable subject matter of claims 5, 9 and 24, respectively. Accordingly, dependent claims 12, 16-22 and 28 are allowable over any combination of Sekimura and Kennedy. Reconsideration and withdrawal of the rejections are respectfully requested.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue. If the Examiner deems that a telephone conversation would further the prosecution of this application, the Examiner is invited to call the undersigned at (202) 496-7500.

Application No.: 10/025,765
Amendment dated July 16, 2004
Reply to non-final Office Action dated April 23, 2004

Docket No.: 8733.514.00-US

If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. §1.136, and any additional fees required under 37 C.F.R. §1.136 for any necessary extension of time, or any other fees required to complete the filing of this response, may be charged to Deposit Account No. 50-0911. Please credit any overpayment to deposit Account No. 50-0911. A duplicate copy of this sheet is enclosed.

Dated: July 16, 2004

Respectfully submitted,

By Valerie Hayes
Valerie Hayes

Registration No.: 53,005
MCKENNA LONG & ALDRIDGE LLP
1900 K Street, N.W.
Washington, DC 20006
(202) 496-7500
Attorney for Applicant